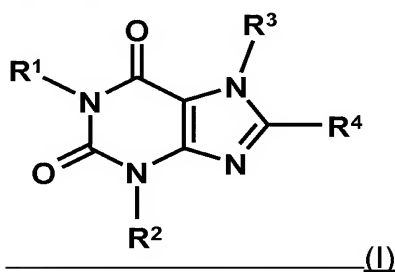


CLAIMS

1–4. (canceled)

5. (currently amended) A compound of formula (I)



~~The compound of general formula (I) according to claim 4, wherein:~~

R¹ is a [2-(cyclopropylcarbonylamino)phenyl]carbonylmethyl or [2-(pyridylcarbonylamino)phenyl]carbonylmethyl group;

R² is a methyl group;

R³ is a 2-buten-1-yl, 3-methyl-2-buten-1-yl, or a 2-butyne-1-yl group; and

R⁴ is a (3-aminopiperidin-1-yl) group,

or a prodrug or salt thereof.

6. (currently amended) A compound selected from:

~~(1)~~ 1-[2-(2-formylaminophenyl)-2-oxoethyl]-3-methyl-7-(3-methyl-2-buten-1-yl)-8-(3-aminopiperidin-1-yl)xanthine;

~~(1)(2)~~ 1-(2-{2-[(cyclopropylcarbonyl)amino]phenyl}-2-oxoethyl)-3-methyl-7-(3-methyl-2-buten-1-yl)-8-(3-aminopiperidin-1-yl)xanthine;

~~(3)~~ 1-[2-(2-formylaminophenyl)-2-oxoethyl]-3-methyl-7-(2-butyne-1-yl)-8-(3-aminopiperidin-1-yl)xanthine;

~~(2)(4)~~ 1-(2-{2-[(cyclopropylcarbonyl)amino]phenyl}-2-oxoethyl)-3-methyl-7-((*E*)-2-buten-1-yl)-8-((*R*)-3-aminopiperidin-1-yl)xanthine;

~~(3)(5)~~ 1-(2-{2-[(cyclopropylcarbonyl)amino]phenyl}-2-oxoethyl)-3-methyl-7-((*E*)-2-buten-1-yl)-8-((*S*)-3-aminopiperidin-1-yl)xanthine;

~~(4)(6)~~ 1-(2-{2-[(cyclopropylcarbonyl)amino]phenyl}-2-oxoethyl)-3-methyl-7-(2-butyne-1-yl)-8-((*R*)-3-aminopiperidin-1-yl)xanthine;

~~(5)(7)~~ 1-(2-{2-[(cyclopropylcarbonyl)amino]phenyl}-2-oxoethyl)-3-methyl-7-(2-butyne-1-yl)-8-((*S*)-3-aminopiperidin-1-yl)xanthine; and

~~(6)(8)~~ 1-[2-(2-{[(pyridin-2-yl)carbonyl]amino}phenyl)-2-oxoethyl]-3-methyl-7-((*E*)-2-buten-1-yl)-8-(3-aminopiperidin-1-yl)xanthine,

or a prodrug or salt thereof.

7–10. (canceled)

11. (original) The compound of formula (I) according to claim 5, wherein the compound is a physiologically acceptable salt.

12. (currently amended) The compound ~~of formula (I)~~ according to claim 6, wherein the compound is a physiologically acceptable salt.

13. (currently amended) A pharmaceutical composition comprising a compound of formula (I) according to claim 5 ~~one of claims 1 to 12~~ and an inert carrier or diluent.

14. (currently amended) The pharmaceutical composition according to claim 13, wherein the compound of formula (I) is incorporated with the inert carrier or diluent by a non-chemical method.

15. (currently amended) A method comprising administering to the patient a compound ~~of formula (I)~~ according to claim 5 or 6 ~~one of claims 1 to 12~~ for the prevention or treatment of a disease or a condition selected from the group consisting of: type 1 and type 2 diabetes mellitus, ~~rheumatoid arthritis~~, obesity, ~~allograft transplantation~~ and calcitonin-induced osteoporosis.

16. (new) A pharmaceutical composition comprising a compound according to claim 6 and an inert carrier or diluent.

17. (new) The pharmaceutical composition according to claim 16, wherein the compound is incorporated with the inert carrier or diluent by a non-chemical method.